

SOCIAL INTERACTIONS IN THREE SUPPORTED EMPLOYMENT OPTIONS: A COMPARATIVE ANALYSIS

KEITH STOREY

ALLEGHENY-SINGER RESEARCH INSTITUTE

AND

ROBERT H. HORNER

UNIVERSITY OF OREGON

Controversy exists over the benefits that workers with severe disabilities accrue under different supported employment options. This study focused upon one benefit of supported employment: social integration. Direct observation procedures were used to assess the social interactions of 37 adults with severe disabilities in 18 employment programs representing three different supported employment contexts (individual, enclave, and work crew). Results indicated that workers employed in individual and enclave programs had significantly more contact with nondisabled persons than did members of work crews. No differences were detected in the social contact rate between disabled and nondisabled workers in individual versus enclave sites. Furthermore, few differences in type of interactions across the three different work options were revealed. Results suggest that both individual and enclave models are capable of facilitating social integration. However, characteristics of specific job sites, more so than the employment model per se, may determine whether a particular employment setting is conducive to social integration.

DESCRIPTORS: supported employment, integration, employment models, direct observation, social interactions, severely handicapped

One of the most important reasons for employing persons with severe disabilities is to promote their social integration with nondisabled peers (Wehman & Moon, 1987). Social integration has been defined as "regular access to interactions with individuals without identified handicaps" (Will, 1984, p. 2). Integration in supported employment settings has been a difficult phenomenon to define

and measure. In relation to employment, Mank and Buckley (1989) describe integration as "... adherence to regular and ordinary patterns of minute-to-minute and day-to-day working life" (p. 320). Social integration in employment settings has been assessed using direct observation procedures (Storey & Knutson, 1989; Storey, Rhodes, Sadow, Loewinger, & Petherbridge, 1991), clique analysis (Yan et al., 1990), narrative recording (Chadsey-Rusch, 1990; Chadsey-Rusch & Gonzalez, 1988; Chadsey-Rusch, Gonzalez, Tines, & Johnson, 1989), and questionnaires (Shafer, Rice, Metzler, & Haring, 1989).

The three supported employment options most frequently used are individual work sites, enclaves, and work crews (Moon & Griffin, 1988). Individual work sites consist of 1 individual with a disability who works at a community site with support (Wehman & Kregel, 1985). The type and level of assistance provided by the employment specialist are decreased over time, although regular contact is maintained. Enclaves consist of a group of individuals (no more than 8) working within a regular

The completion of this article was supported by Contract 023BH0009 from the Office of Special Education Programs, U.S. Department of Education. This research was conducted by the first author in partial fulfillment of requirements for the PhD degree from the University of Oregon.

The authors thank Howard Loewinger, Richard Parker, Larry Rhodes, and Dave Mank for their input on the completion of this research. We also thank the Oregon Employment Services Corporation, Portland Employment Program, South Lane Maintenance Corporation, Harbor Mobile Crews, Trillium Employment Services, Vantage Foundation, Stepping Stones, Transitional Employment Services, Sound Employment, McKenzie Personnel Systems, Polk Enterprises, the Midvalley Training Center, and the Edwards Center.

Requests for reprints may be addressed to Keith Storey, Allegheny-Singer Research Institute, 320 East North Avenue, Pittsburgh, Pennsylvania 15212-9986.

industry (Rhodes & Valenta, 1985). Supervision and instruction are generally provided by an employment specialist for an extended period of time and may not be faded. Work crews consist of a group of individuals (no more than 8) who perform specialized contract services, such as custodial services or groundskeeping, at different sites in the community (Mank, Rhodes, & Bellamy, 1986). Supervision and instruction are provided by an employment specialist.

A debate exists over the type of work environments and features most effective in promoting integration (Brown et al., 1991; Mank & Buckley, 1989). Brown et al. (1991) argue that (a) enclaves and work crews are "unnecessarily restrictive," (b) "many benefits can be realized in individually appropriate integrated work environments that can never be realized in enclaves or work crews" (p. 220), and (c) development of social relationships with nondisabled co-workers is limited in enclave and work crew settings. Mank and Buckley (1989) point out that greater detail and specificity are needed to understand all of the dimensions of integration, to decide when a specific level of work-life integration is acceptable, and to guide the process of measuring integration.

Thus far, the debate has been argued more on ideological than empirical grounds (Bellamy et al., 1984; Brown et al., 1984, 1991). Indeed, only a few studies documenting the efficacy of supported employment as a means of fostering social integration have been reported (Kregel, Wehman, & Banks, 1989; Rusch, Johnson, & Hughes, 1990). If the benefits of supported employment are to be fully realized, it is important that outcomes, especially those pertaining to social integration, be documented (Storey, Sandow, & Rhodes, 1990).

This study examined the social interaction patterns of adults with severe disabilities who were receiving one of three types of employment support (enclaves, work crews, or individual placements). Social interactions under these different options were compared. In addition, worker and employment setting characteristics were assessed as possible determinants of high rates of social interactions.

METHOD

Participants and Settings

The participants were randomly selected from employees in 18 supported employment programs who met the following criteria: IQ score of 54 or below and an Adaptive Behavior Scale (ABS) score (TMR norms) (Lambert, 1981) of 67.3% or below. The cut-off score for this study indicates that 67.3% of persons labeled as trainable mentally retarded (TMR) received ABS scores lower than those of the study participants. The participants had spent a mean of 23.8 months (range, 5 to 74) on the job before study involvement. Table 1 provides a description of the 37 participants and their work settings. The mean age of the participants was 32.7 years (range, 22 to 64). The overall mean IQ of the participants was 35.6 (range, 10 to 52), and the overall ABS score was 36.7% (range, 1.8% to 67.3%).

Observations were conducted at 20 different job sites involving 18 supported employment programs in three states (Washington, Oregon, and California). The employment programs were selected through personal contacts by the authors. Job features for each setting were analyzed using a checklist (available from the first author) completed by the human service supervisor or job coach at each site. Table 1 presents a summary of information compiled from checklist responses.

A wide variety of types of work were represented in this study. Most workers were in food preparation and services, manufacturing and machine operations, or groundskeeping. Slightly less than half (40%) of the individual workers, approximately half (54%) of the enclave workers, and all of the work crew members were paid based on their productivity. Each of the individual workers were engaged in stable work, whereas the majority of the enclave (69%) and work crew members (69%) engaged in changing types of work. The level of support required by the workers varied widely. A slight majority (60%) of the individual workers were hired by the business where they worked, whereas all of the enclave and work crew members

Table 1
Characteristics of Workers and Features of Job Sites

Demographics		Option		
		Individual	Enclave	Work crew
Age	Mean	29.8	29.9	35.5
	Median	26	26	37
	Range	22–48	22–64	23–50
IQ	Mean	38.2	32	34.1
	Median	40	34	40
	Range	17–51	19–45	10–52
ABS score ^a	Mean	37.1%	40.1%	29%
	Median	34.5%	58%	16.4%
	Range	1.8–67.3%	1.8–67.3%	1.8–67.3%
Months on job	Mean	15.2	24.7	30.1
	Median	11	23	25
	Range	1–49	5–66	2–74
Verbal ability ^b	Mean	8	6.2	7.6
	Median	6	7	10
	Range	0–14	0–14	0–14
Number in company	Mean	38.6	378.8	10.8
	Median	35	200	6
	Range	6–100	15–900	6–20
Average monthly take-home pay over last quarter	Mean	\$180	\$282	\$115
	Median	\$200	\$193	\$72
	Range	\$15–350	\$44–630	\$36–405
Average wage (per hour)		\$2.05	\$2.40	\$1.28
Hours worked per week	Mean	21.9	29.4	22.4
	Median	20	20	27
	Range	7–40	20–40.1	4.6–33.3
Number of workers with disabilities in immediate work area	Mean	0.7	5.2	3.6
	Median	0	4	4
	Range	0–3	0–8	1–5
Number of workers without disabilities in immediate work area	Mean	3.4	4.9	0.9
	Median	3	5	0
	Range	0–6	0–10	0–3
Number of workers with disabilities in immediate break area	Mean	0.3	5.2	4.3
	Median	0	4	4
	Range	0–1	3–8	2–5
Number of workers without disabilities in immediate break area	Mean	16.6	35.7	1.1
	Median	4	20	0
	Range	0–70	2–100	0–3

^a TMR norms.

^b Questions 35, 36, 39, and 40 from ABS (0–16).

were hired by the support program. Most (78%) of the workers engaged in three or more tasks, with only 2 workers engaged in only one type of task.

Information from the checklists indicated that the individual site workers' interactions ranged from exposure or observation (i.e., exposure to or observation of nondisabled individuals, but virtually

no social contact) to balanced interactions (i.e., a worker with disabilities is able to establish relationships with nondisabled individuals that extend beyond the work setting). Most individual site workers had parallel (i.e., continuing opportunities for interactions with nondisabled individuals, but disabled worker's tasks were functionally indepen-

Table 2
Observation Categories and Mean Estimates of
Interobserver Agreement

Observation category	Occur- rences agree- ment (%)	Non- occur- rences agree- ment (%)
Job engagement	82	96
Interaction with		
Work supervisor	98	99
Human service supervisor	90	98
Nondisabled co-worker	86	99
Disabled co-worker	85	99
Other	93	99
Interaction Category		
Receiving assistance	77	99
Requesting assistance	31	99
Providing assistance	29	99
Receiving instruction	83	98
Providing instruction	75	99
Receiving social amenities	69	99
Providing social amenities	71	99
Receiving compliments	81	99
Providing compliments	100	100
Receiving teasing	100	100
Providing teasing	No occurrences during reliability sessions	
Receiving criticism	67	99
Providing criticism	No occurrences during reliability sessions	
Work conversation	80	99
Personal conversation	78	99
Other	85	99
Unknown	58	99
Unacceptable behavior	98	99
Integrated setting	90	95

dent of the main tasks of nondisabled workers) or significant (i.e., significant number of daily interactions that called for cooperative interaction with nondisabled workers) interactions. The enclave workers had parallel or significant interactions. Most of the persons in work crews had only incidental (interactions with nondisabled individuals incidental to the worker's primary tasks) interactions with nondisabled persons.

Specifically, 9 of the 10 individual workers had

access to workers without disabilities in their work area, and all 10 had access during break or lunch times. Half of the individual workers had access to their human service supervisor and work supervisor during work and break or lunch times. All of the enclave workers had access in the work area to workers with and without disabilities and most had access to their human service supervisor and work supervisor. These levels remained similar during break or lunch times. All of the work crew members had access to workers with disabilities and to their human service supervisor during work and break or lunch times. Slightly more than half of work crew members had access to workers without disabilities during work and break or lunch times, and only 1 had access to a work supervisor.

Measures of Social Interactions

The behavioral observation system was derived from previous research (Storey & Knutson, 1989; Storey et al., 1991). The observational categories (and estimates of occurrences and nonoccurrences of observer agreement) are provided in Table 2. Definitions of the interaction categories are described in Storey and Knutson (1989) and are available from the first author upon request. "Other" persons were those other than supervisors or co-workers and included customers, vendors, or service providers in restaurants or shops. The "other" interaction category was an interaction not defined in the 16 definitions of social interaction.

Observation Procedures

All participants were aware of the observations. Most were observed on 20 different occasions (10 observations during work times and 10 during lunch or break times, with one work and one lunch or break observation per day). Because of various logistical problems (loss of data collectors, participants being fired from their jobs, 1 worker not taking a break), not all participants were observed for 20 sessions. The observations occurred during randomly selected work and lunch times, and the participants were observed in a randomly selected order using a random numbers table.

An audiotape recorder with headphones was used to cue the observers for the intervals. An interval

recording system of 10-s observe, 5-s record was used during each 30-min session. At the start of each interval, observers used a momentary time sampling procedure to rate the job engaged category. Job task and setting categories were scored every 5 min using a momentary time sampling procedure. The other categories were scored using a partial-interval recording system, and more than one category could be scored during an interval.

Interobserver Agreement

Interobserver agreement for the direct observation procedures were recorded on 96 (14%) of the 700 observation sessions. At least one interobserver agreement session occurred for each worker in the study. An interval-by-interval agreement ratio, in which all 10-s intervals were scored (total occurrence and nonoccurrence agreement, including those intervals with and without social interactions), was used to establish interobserver agreement. The interval-by-interval agreement mean was 93.6%, with a range of 76% to 100%. Level of agreement on nonoccurrences, in which it was agreed that no interactions occurred during the interval, was 97.9%, with a range of 77% to 100%. The occurrence agreement mean, in which it was agreed that an interaction occurred during the interval, was 90.4%, with a range of 50% to 100%. The occurrence plus agreement mean (intervals in which there was agreement that an interaction occurred and agreement on all interaction categories) was 76.3%, with a range of 42% to 100%. To control for chance agreement, kappa was also calculated for occurrences plus agreement and was found to be .89. (Kappas over .75 are generally considered excellent: Fleiss, 1981.)

RESULTS

Data for the observation categories represent percentages of observation intervals. Because these percentages were not calculated on the same number of observations for each worker and consequently may not represent a linear comparison, they were transformed prior to statistical analysis using an arcsin transformation. The data were analyzed for homogeneity of variance via a Bartlett test. Not all

assumptions for homogeneity of variance were met in all cases (e.g., interactions with handicapped co-workers during work times, receiving assistance during work times, unknown interactions during work times, and integrated setting during break times). Because the power of multivariate tests generally declines as the number of dependent variables is increased (Stevens, 1986), planned comparisons, rather than an omnibus F test, were applied (Hays, 1981). Separate analyses of variance were computed on those categories occurring in more than 1% of the intervals. In addition, eta was analyzed to determine effect size. Eta describes the strength of the relationship between group membership and may be a better indicator of significance than p values (Kazdin, 1986). Effect size provides a measure of the strength of association between the dependent variable and the independent variable (Cohen, 1977).

Persons with Whom Interactions Occurred

Table 3 presents the statistical analyses concerning persons with whom the supported employees interacted. Statistically significant differences in interactions with nondisabled co-workers during both work, $F(2, 34) = 13.9, p < .001$, and break or lunch, $F(2, 33) = 12.3, p < .001$, times were found. During work, workers in individual sites interacted most with nondisabled co-workers, followed by enclave and work crew members. During break or lunch times, both individual and enclave workers interacted with nondisabled co-workers more than work crew workers did (see Figure 1 for the grand mean and range of means across the three options).

During both work and break or lunch times, the workers in individual sites did not interact more with the work supervisor than did workers in enclaves, but they did interact more than those in work crews did; $F(2, 34) = 4.48, p = .019$ for work times and $F(2, 33) = 4.75, p < .001$ for break or lunch times. However, there was great variation within and among individual and enclave sites. Some workers had no interactions with the work supervisor, whereas others interacted up to 10% of the time.

Among the three options, no statistically signif-

Table 3
Descriptive and Statistical Analyses for Persons with Whom Interaction Occurred

Category	Individual (I)		Enclave (E)		Work crew (W)		F	Effect size	Group differences ^b
	M ^a	SD	M ^a	SD	M ^a	SD			
Nondisabled co-worker	W ^c	3.49	3.98	0.85	1.03	0.06	13.88**	.67	I > E > W
	B	3.14	2.90	7.20	7.62	0.80	12.33**	.65	EI > W
Disabled co-worker	W	0.55	1.40	1.64	3.08	4.49	19.75**	.73	W > E, I
	B	0.22	0.54	4.37	7.13	5.46	10.52**	.62	E, W > I
Work supervisor	W	2.10	2.88	1.19	1.97	0.10	4.48*	.45	I > W
	B	2.23	3.92	0.42	0.56	0.10	4.75*	.47	I > W
Human service supervisor	W	5.84	13.7	13.4	14.7	6.41	2.91		
	B	6.74	15.0	4.04	4.53	4.31	1.56		
Other	W	1.78	3.69	0.03	0.09	0.48	3.38*	.40	I > E
	B	1.61	3.54	0.37	0.41	0.74	0.99		

^a Percentage of intervals.
^b Group differences are based on post hoc Tukey test ($p = .01$).
^c W = work periods; B = break or lunch periods.
* = $p < .05$.
** = $p < .001$.

icant differences in interactions with the human service supervisor were observed. Again, variability among individual workers was high. Two individual workers and 3 enclave workers had no contact with a human service supervisor. The worker with the most interactions with a human service supervisor was a worker in an individual site who was deaf and blind.

Workers in individual and enclave sites had fewer interactions with disabled co-workers during work times than did work crew members, $F(2, 34) = 19.8$, $p < .001$. During break or lunch times, enclave and work crew workers interacted more with disabled co-workers than did individual workers, $F(2, 33) = 10.5$, $p < .001$.

Workers in individual sites interacted more with others during work times than enclave workers did, $F(2, 34) = 3.38$, $p = .046$. There were no significant differences during break or lunch times (see Figure 1).

Type of Interactions

Workers in individual and enclave sites received less assistance during work times than did members of work crews, $F(2, 34) = 8.09$, $p < .001$. No statistically significant differences in any of the other categories, except for the "other" and "unknown" categories, were found (see Table 4). In the "other" interaction category during work times, a statistically significant difference was found, with workers in individual and enclave sites having fewer of these interactions than members of work crews, $F(2, 34) = 4.78$, $p = .015$. Workers in individual and enclave sites had significantly fewer "unknown" interactions than did members of work crews during work times, $F(2, 34) = 5.12$, $p = .011$. During break or lunch times, both workers in enclaves and workers in work crews had significantly more "unknown" interactions than workers in individual sites, $F(2, 33) = 3.65$, $p = .037$.

Integrated Settings

During both work and break times, employees in individual and enclave sites spent more time in integrated settings (e.g., in proximity with nondisabled people) than did employees in work crews. During work times, individual, enclave, and work

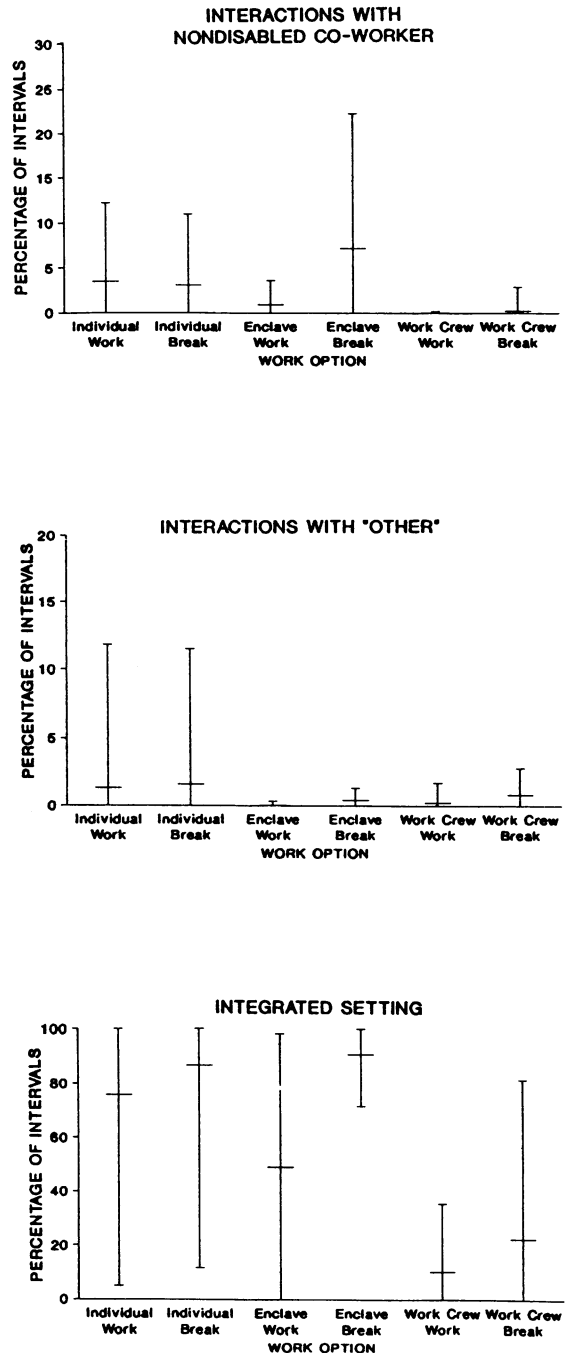


Figure 1. Grand mean and range of means for percentage of intervals of interactions with nondisabled co-workers across the three employment options during work and break times (top), grand mean and range of means for percentage of intervals of interactions with others across the three employment options during work and break times (middle), and grand mean and range of means for percentage of intervals in integrated settings across the three employment options during work and break times (bottom).

Table 4
Descriptive and Statistical Analyses of Type of Interactions, Integrated Setting, Unacceptable Behavior, and Job Engaged

Category	Individual (I)		Enclave (E)		Work crew (W)		F	Effect size	Group differences ^a
	M ^c	SD	M ^c	SD	M ^c	SD			
Receiving assistance	W ^c B	0.80 1.74	2.52 5.01	0.71 0.21	3.39 0.15	3.39 0.19	8.08** 1.16	.568	W > E, I
Requesting assistance	W B	0.08 0.09	0.11 0.12	0.16 0.03	0.12 0.02	0.22 0.08	— ^d		
Providing assistance	W B	0.20 0.03	0.40 0.10	0.07 0.07	1.45 0.18	2.30 0.24	—		
Receiving instruction	W B	4.66 3.06	9.64 8.44	8.33 1.00	7.67 0.79	4.13 0.60	1.95 0.05		
Providing instruction	W B	0.06 0.01	0.09 0.03	0.05 0.07	0.20 0.03	0.35 0.05	—		
Receiving criticism	W B	0.04 0	0.09 0	0.03 0.03	0.18 0.02	0.25 0.04	—		
Providing criticism	W B	0 0	0 0	0.01 0.01	0 0	0 0	—		
Receiving social amenities	W B	1.25 1.05	1.73 1.03	0.45 1.67	0.70 2.72	1.13 4.08	0.93 0.54		
Providing social amenities	W B	0.88 0.85	1.33 1.24	0.15 1.18	0.26 1.35	0.38 2.05	2.01 0.16		
Receiving compliments	W B	0.87 0.23	1.37 0.31	5.05 0.24	1.95 0.18	2.05 0.16	2.70 0.00		
Providing compliments	W B	0.01 0.03	0.03 0.07	0.01 0.01	0.03 0.0	0.09 10.03	—		
Receiving teasing	W B	0.04 0.06	0.09 0.19	0.04 0	0.05 0.23	0.08 0.46	—		
Providing teasing	W B	0.07 0.02	0.18 0.06	0 0	0.02 0.18	0.06 0.35	—		
Work conversation	W B	3.69 1.49	5.02 1.70	4.02 0.90	4.02 1.12	3.69 1.02	0.36 0.66		
Personal conversation	W B	1.76 5.19	2.99 7.19	0.55 9.49	0.88 7.56	0.71 7.04	0.75 1.47		
Other	W B	0.25 0.94	0.40 1.73	0.15 1.1	1.03 0.95	1.64 0.85	4.77* 0.74	.469	W > E, I

Table 4
(Continued)

Category	Individual (I)		Enclave (E)		Work crew (W)		F	Effect size	Group differences ^b
	M ^c	SD	M ^c	SD	M ^c	SD			
Unknown	W 0.73 0.12	0.92 0.20	0.38 1.02	0.51 1.74	1.39 0.70	1.12 0.71	5.12* 3.64*	.482 .425	W > E E, W > I
Integrated setting	W 75.9 86.8	31.5 27.6	49.2 90.8	41.1 10.1	10.3 22.3	12.7 24.9	14.59** 34.41**	.680 .822	E, I > W E, I > W
Unacceptable behavior	W 0.10 0.13	0.36 0.28	0.01 0	0.02 0	0.07 0.32	0.20 1.08	—	—	—
Job engaged	87.3	16.9	78.5	19.4	77.4	15	1.96		

^a Percentage of intervals.^b Group differences are based on post hoc Tukey test ($p = .01$).^c W = work periods; B = break or lunch periods.^d No analysis because occurrence less than 1% of intervals.* = $p < .05$.** = $p < .001$.

crew workers were in integrated settings 75.9%, 49.2%, and 10.3% of the observation intervals, respectively, $F(2, 34) = 14.59$, $p < .001$. During break or lunch times, individual, enclave, and work crew workers were in integrated settings 86.8%, 90.8%, and 22.3% of the observation intervals, respectively, $F(2, 33) = 34.42$, $p < .001$. Effect size (.82) was greatest during break or lunch times (see Figure 1).

Features of Job Site

A multiple regression analysis was computed to examine the importance of features of the job site in promoting social interactions. Results indicated that neither access to a nondisabled co-worker and others during break or lunch and work times nor the number of months on the job was predictive of interactions (all $p > .05$).

Features of Workers

Multiple regression analyses were computed to yield predictions of successful integration based on individual worker characteristics. The characteristics analyzed were the verbal ability of the worker, the ABS score of the worker, and the IQ of the worker. No attempt was made to control any steps of the analysis, because there is little previous research on this topic and it is not clear what characteristics are most important in predicting interaction patterns. Results indicated that a worker's ABS score was the best predictor of interactions with nondisabled co-workers ($p = .02$). None of the three variables was a good predictor of interactions with others.

Work Engagement and Unacceptable Behavior

There were no statistical differences across work options in the percentage of intervals in which the workers were engaged in the job or in which unacceptable behavior occurred.

DISCUSSION

One of the most important considerations related to supported employment is whether there are interactions between workers with and without dis-

abilities. Our findings suggest that individual and enclave job sites are more likely to involve interactions between disabled and nondisabled persons than are work crew sites. Interactions with nondisabled persons occurred more frequently in individual job sites during work times and within individual and enclave sites during break or lunch times. However, the amount of interaction between disabled and nondisabled persons in the individual and enclave sites was quite variable. Some workers in both options rarely, if ever, interacted with nondisabled persons, whereas others interacted frequently. This variability suggests that it may be features of specific job sites, rather than the job model itself, that promote integration in the work site.

Because work crews generally do not have co-workers without disabilities, the "other" category reflects the opportunity for workers in work crews to interact with nondisabled persons. However, this type of interaction occurred rarely during either work, break, or lunch periods. Work crews were predominantly in segregated settings during both work ($M = 89.7\%$) and break or lunch times ($M = 77.7\%$) and had few interactions with others ($M < 1\%$). Few statistically significant differences were revealed in the content of the interactions across the three options.

Limitations of This Research

Several limitations of this research should be noted. First, relatively few (37) supported employees participated. The small number of participants reflects our difficulty in identifying supported employees who met our criteria for having severe disabilities. Given the small sample size, it is unclear to what extent these 37 individuals represented all supported employees with severe disabilities.

Furthermore, only one type of integration—social interaction—was considered. Because of the lack of empirical research concerning integration in supported employment, it is yet to be determined what assessment components are most important in understanding integration in supported employment settings. Social networks, reciprocity, social support, clique analysis, and social validation measures may

also be important indices and might be included profitably in more comprehensive assessment paradigms.

Third, no normative comparisons were drawn concerning the social interaction patterns of the workers without disabilities in the same work sites. Such normative comparisons may be a critical factor in judging what level of social interaction patterns are appropriate (Storey & Horner, in press). Without this comparison, it is difficult to judge the adequacy of the interaction levels found in this research.

Fourth, there was no attempt to evaluate the quality or importance of the interactions that occurred. It may be that the quality or importance of the interactions, rather than the level, is most significant. Social validation procedures may be the most appropriate research method to evaluate the quality or importance of the interactions (Kazdin, 1977).

Finally, the number of reliability estimates and the level of interobserver agreement within some of the scoring categories were low. Hence, these results should be viewed with caution.

Implications for Supported Employment

Our findings contradict the assertions of those who argue that individual sites are most capable of being integrated and that both enclave and work crew settings are less likely to provide interactions with co-workers without disabilities (Brown et al., 1991). Our findings suggest that it may be features of specific job sites (for individual and enclave settings), rather than the employment model per se, that results in the integration or segregation of the setting. Having nondisabled co-workers in the same work area, sharing a job task, eating lunch together, and sharing activities together outside of the work environment may be more important than the employment model.

Future Research

Future research should examine integration levels and social interaction patterns of the workers without disabilities as a guide for enhancing integration of workers with disabilities. Judging the quality or

importance of the interactions will be a difficult task. Social validation procedures assessing the social importance of the effects (Storey & Horner, in press) may be the most appropriate assessment method, but these procedures have received little attention in supported employment settings and need to be examined further.

Another area for future research is personal satisfaction (McAfee, 1986). Different workers may prefer different levels of social interactions. It is important to assess these preferences and to find appropriate job matches. Assessing these preferences may be difficult for workers with severe disabilities who have limited communication skills (Nisbet & Hagner, 1988). There is little current empirical research on this topic involving workers in supported employment settings (Moseley, 1988).

Finally, there is a need to investigate methods of enhancing integration. As our research indicates, a worker may be physically integrated yet socially segregated in a work setting. Strategies for modifying the work environment (Gaylord-Ross, Salzberg, Curl, & Storey, in press), teaching co-workers intervention skills (Likins, Salzberg, Stowitschek, Lignugaris/Kraft, & Curl, 1989), teaching social interaction skills to workers with disabilities (Breen, Haring, Pitts-Conway, & Gaylord-Ross, 1985), and increasing communication skills (Halle, 1988) are all needed. It is important that, no matter what supported employment option is used, every worker with disabilities be in an integrated work site.

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Received January 22, 1990

Initial editorial decision March 31, 1990

Revisions received July 19, 1990; October 10, 1990

Final acceptance January 21, 1991

Action Editor, John M. Parrish